CATALOGUE # IV2-002

MLT™ INTACT PROINSULIN KIT

invitron
high sensitivity diagnostics

Catalogue No.

MLT™ Intact Proinsulin Kit …….…… IV2-002

Intended Use

Invitron's MLT Intact Proinsulin Assay is an immunometric assay using Molecular Light Technology Chemiluminescence for the quantitative measurement of intact proinsulin in human plasma samples. Measurements of proinsulin are used in the diagnosis and treatment of patients with type 2 diabetes.

Test Principle

The MLT Intact Proinsulin Assay is a two-site immunoassay, employing a specific solid phase antibody immobilised on microtitre wells and a soluble antibody labelled with a chemiluminescent acridinium ester. The sample is incubated in the microtitre well together with a buffer and, after a wash step, the labelled antibody solution is added. A second incubation is followed by a further wash step to remove unbound labelled antibody before measurement. The bound luminescence is quantified by a microtitre plate luminometer capable of in situ reagent addition. The luminescent reaction is a rapid flash type (>95% complete in 1 second) which permits the entire plate to be read in approximately 5 minutes.

Specifications

Sample Types	Serum and Plasma
Assay Time	Approx. 3 hours 15 minutes
Range	0 - 100 pmol/l.
Sample Size	50 µl
Sensitivity	0.02 pmol/l

Specificity

Intact proinsulin	……	100%
Insulin	……	0.0%
C-peptide	……	0.0%
32-33 split proinsulin	……	5.6%
Des 31-32 split proinsulin	……	1.4%
65-66 split proinsulin*	……	37%
Des 64-65 split proinsulin*	……	63%

* Studies have shown that 65-66 split proinsulin and Des 64-65 split proinsulin are not present at detectable levels in human samples.

Highlights

- ✓ Highly specific for Intact proinsulin
- ✓ Highly precise with low CVs
- ✓ Highly specific marker for insulin resistance in type 2 diabetes
- ✓ Calibrated against WHO International Standard (IRP 09/296)

Summary of Protocol

Add 50 µl Sample Buffer to wells
↓
Add 50 µl Standard / Sample to respective wells
↓
Incubate for 2 hours at 37°C
↓
Wash wells x3
↓
Add 100 µl Labelled Antibody
↓
Incubate for 1 hour at 37°C
↓
Wash wells x3
↓
Measure light output in a plate luminometer

See kit insert or email us for complete protocol.

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